

RECEIVED

NOV 26 2001

TECH CENTER 1600/2300

Substitute for form 1449A/PTO		Complete if known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/939,514
		Filing Date	August 24, 2001
		First Named Inventor	Sessler, et al.
		Group Art Unit	1626
		Examiner Name	Not yet assigned
Sheet 1 of 7	Attorney Docket Number	045404.0003	

U.S. PATENT DOCUMENTS					
Ref. Des.	Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code (if known)		
A3	/	5,410,045	OCT 1 1998 NOV 20 2001 PATENT OFFICE	Sessler, et al.	04-25-1995
A4		5,530,123		Sessler, et al.	06-25-1996
A1		5,808,059		Sessler, et al.	09-15-1998
A2		6,262,257		Gale, et al.	07-17-2001

FOREIGN PATENT DOCUMENTS							
Ref. Des.	Exr. Initials	Foreign Patent Document			Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ₁
		Country Code	Number	Kind Code (if known)			
B2		WO	89/08092		Wainwright	09-08-1989	
B1		WO	93/13150		Guthrie, <i>et al.</i>	07-08-1993	
B3		EP	0 233 701	A2	Fukuda, <i>et al.</i>	08-26-1987	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Ref. Des.	Exr. Init.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.		T ₁
C1		ALLEN, <i>et al.</i> , "Binding of Neutral Substrates by Calix[4]pyrroles," <i>J. Am. Chem. Soc.</i> , Vol. 118, No. 49, pp. 12471-12472, September, 1996, American Chemical Society.		
C2		ANDREETTI, G., "Crystal and Molecular Structure of Cyclo[quater[(5- <i>t</i> -butyl-2-hydroxy-1,3-phenylene)methylene]] Toluene (1:1) Clathrate," <i>J.C.S. Chem. Comm.</i> , 1005-1007, 1979, The Royal Society of Chemistry.		
C3		ASFARI, <i>et al.</i> , "Quick Synthesis of the First Double Porphyrin Double Calix[4]arene," <i>Tetrahedron Letters</i> , Vol. 34, No. 4, pp. 627-628, 1993, Elsevier Science Ltd.		
C4		BAEYER, A., "Ueber ein Condensationsproduct von Pyrrol mit Aceton," <i>Ber. Dtsch. Chem. Ges.</i> , 19:2184-2185, 1886, The Royal Society of Chemistry.		
C5		BEER, <i>et al.</i> , "A Neutral Upper to Lower Rim Linked Bis-Calix[4]arene Receptor that Recognises Anionic Guest Species," <i>Tetrahedron Letters</i> , Vol. 36, No. 5, pp. 767-770, January, 1995, Elsevier Science Ltd.		
C6		BEER, <i>et al.</i> , "Anion Recognition by Novel Ruthenium(II) Bipyridyl Calix[4]arene Receptor Molecules," <i>J. Chem. Soc., Chem. Commun.</i> , 1269-1271, 1994, The Royal Society of Chemistry.		
C7		BEER, <i>et al.</i> , "Anion Recognition by Redox-Responsive Ditopic Bis-Cobaltocenium Receptor Molecules Including a Novel Calix[4]arene Derivative That Binds a Dicarboxylate Dianion," <i>Organometallics</i> , 14:3288-3295, July, 1995, American Chemical Society.		
C8		BEER, <i>et al.</i> , "Structures of Potassium encapsulated within the 1,3-Alternate Conformation of Calix[4]arenes," <i>J. Chem. Soc. Dalton Trans.</i> , 3479-3485, 1994, The Royal Society of Chemistry.		
C9		BEER, <i>et al.</i> , "Synthesis and Co-ordination Chemistry of a Novel Bis (Benzo Crown Ether) Substituted Calix[4]arene that can Simultaneously Complex Cations and Anions," <i>J. Chem. Soc. Dalton Trans.</i> , 3117-3123, October, 1995, The Royal Society of Chemistry.		

Examiner Signature		Date Considered	3/07
--------------------	--	-----------------	------

RECEIVED

NOV 26 2001

TECH CENTER 1800/2800

Substitute for form 1449B TQ		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/939,514
		Filing Date	August 24, 2001
		First Named Inventor	Sessler, et al.
		Group Art Unit	1626
		Examiner Name	Not yet assigned
		Attorney Docket Number	045404.0003
Sheet	2		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Ref. Des.	Exr. Initi.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C10		BÖHMER, V., "Calixarenes, Macrocycles with (Almost) Unlimited Possibilities," <i>Angew. Chem. Intl. Ed. Engl.</i> , 34:713-745, July, 1995, VCH Verlagsgesellschaft.	
C11		BONAR-LAW, R., "Porphyrin Synthesis in Surfactant Solution: Multicomponent Assembly in Micelles," <i>J. Org. Chem.</i> , 61:3623-3634, January, 1996, American Chemical Society.	
C12		BROWN, et al., "The Condensation of Cyclohexanone with Furan and Pyrrole," <i>Canadian J. of Chem.</i> , 49: 4017-4022, 1971, N R C Research Press.	
C13		CHELINTZEV, et al., "Simple condensation of pyrrole with methylethyl ketone and methylhexyl ketone, mixed condensation with acetone and methylethyl ketone, and relation of these reactions to the determination of the formulas of chlorophyll and hemin," <i>J. Russian Physical Chem. Soc.</i> , 48:1197-1209, 1916, Chemical Abstracts only, p. 1418, American Chemical Society.	
C14		CHELINTZEV, et al., "Process of condensation of pyrrole and acetone. Constitution of the resulting products," <i>J. Russian Physical Chem. Soc.</i> , 48:105-155, 1916, Chemical Abstracts only, pp. 452-454, American Chemical Society.	
C15		CHEN, et al., "Synthesis and electrochemical polymerization of calix[4]arenes containing N-substituted pyrrole moieties," <i>J. Electroanalytical Chem.</i> , 393: 113-117, August, 1995, Elsevier Science.	
C16		CRESCENZI, et al., "The N ₂ O ₂ porphyrinogen skeleton: Access to a novel class of coordinatively unsaturated transition metal ions," <i>Inorganic Chem.</i> , 35:2413-2414, April, 1996, American Chemical Society.	
C17		De ANGELIS, et al., "A Li ₂ Ti ₂ -substituted acetylene formed from ethylene by reaction with (meso-octaethyl porphyrinogen)titanium," <i>Angewante Chemie</i> , International Edition, English, 34:1092-1094, June, 1995, V C H Verlagsgesellschaft.	
C18		De ANGELIS, et al., "Solvent-dependent Forms of Lithiated 5,5,10,10,15,15,20,20-Octaethylporphyrinogen in Solution and in the Solid State and Reaction with Tetrahydrofuran," <i>J. Chem. Soc., Dalton Trans.</i> , 2467-2469, 1994, The Royal Society of Chemistry.	
C19		De ANGELIS, et al., "Organometallic chemistry of a titanium (IV) meso-octaethylporphyrinogen complex: Carrier properties of polar organometallics and their behavior in insertion reactions," <i>Organometallics</i> , 14:4505-4512, October, 1995, American Chemical Society.	
C20		De ANGELIS, et al., "Oxidation of metal-meso-octaethylporphyrinogen complexes leading to novel oxidized forms of porphyrinogen other than porphyrins. 2. The redox chemistry of iron (II)- and cobalt (II)-meso-octaethylporphyrinogen complexes occurring with the formation and cleavage of two cyclopropane units," <i>J. Am. Chem. Soc.</i> , 116:5702-5713, 1994, American Chemical Society.	
C21		De ANGELIS, et al., "Oxidation of metal-meso-octaethylporphyrinogen complexes leading to novel oxidized forms of porphyrinogen other than porphyrins. 1. The redox chemistry of nickel(II)- and copper (II)-meso-octaethylporphyrinogen complexes occurring with the formation and cleavage of a cyclopropane unit," <i>J. Am. Chem. Soc.</i> , 116:5691-5701, 1994, American Chemical Society.	
C22		DENNSTEDT, et al., "Ueber die Einwirkung des Acetons auf das Pyrrol," <i>Ber. Dtsch. Chem Ges.</i> , 20:850-857, 1887, The Royal Society of Chemistry.	
C23		DIETRICH, et al., "Macrocyclic Chemistry", <i>VCH</i> , New York, p. 82 and p. 160, 1993, VCH Verlagsgesellschaft.	

Examiner Signature	Date Considered
--------------------	-----------------

RECEIVED

NOV 26 2001

TECH CENTER 1600/2800

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT NOV 20 2001 (use as many sheets as necessary)		Application Number	09/939,514
		Filing Date	August 24, 2001
		First Named Inventor	Sessler, et al.
		Group Art Unit	1626
		Examiner Name	Not yet assigned
		Attorney Docket Number	045404.0003
Sheet	3 of 7		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Ref. Des.	Exr. Init.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C24		FLORIANI, C., "The discovery and future prospects of artificial porphyrins: Molecular batteries functioning with the reversible formation and cleavage of cyclopropane units," <i>Chimia</i> , 50:608-611, December, 1996, Neue Schweizerische Chemische Gesellschaft.	
C25		FLORIANI, C., "The porphyrinogen-porphyrin relationship: the discovery of artificial porphyrins," <i>Chem Commun.</i> , 1257-1263, June, 1996, The Royal Society of Chemistry.	
C26		FLORIANI, C., "Transition metal complexes as bifunctional carriers of polar organometallics: Their application to large molecule modifications and to hydrocarbon activation," <i>Pure and Applied Chem.</i> , 68:1-8, January, 1996, (IUPAC), Blackwell Science Ltd.	
C27		FUJIMOTO, et al., "Synthesis and Crystallographic Studies of a Calix[4]arene with a 1,3-Alternate Conformation," <i>J. Chem. Soc., Perkin Trans. 2</i> , pp. 643-648, 1992, Royal Society of Chemistry.	
C28		GALE, et al., "Calix[4]pyrroles: C-rim substitution and tunability of anion binding strength," <i>Chem. Commun.</i> , pp. 665-666, 1997, The Royal Society of Chemistry.	
C29		GALE, et al., "Calix[4]pyrroles: Old Yet New Anion-binding Agents," <i>J. Am. Chem. Soc.</i> , Vol. 118, No. 21, pp. 5140-5141, January, 1996, American Chemical Society.	
C30		GALE, et al., "Calixpyrroles: old yet new anion binding agents," <i>31st Int'l Conf. on Coordination Chemistry</i> , University of British Columbia, Vancouver, Canada, August 18, 1996, publisher unknown.	
C31		GALE, et al., "New Applications for Calixpyrroles," <i>Royal Soc. Chem. U.K. Macrocycles Group Annual General Mtg.</i> , University of Wales, Cardiff, Wales, U.K., December 18, 1996, Royal Society of Chemistry.	
C32		GALE, et al., "Synthesis of a New Cylindrical Calix[4]arene-Calix[4]pyrrole Pseudo Dimer," <i>Tetrahedron Letters</i> , Vol. 37, No. 44, pp. 7881-7884, September, 1996, Elsevier Sciences Ltd.	
C33		GHIDINI, et al., "Complexation of Alkali Metal Cations by Conformationally Rigid, Stereoisomeric Calix[4]arene Crown Ethers: A Quantitative Evaluation of Preorganization," <i>J. Am. Chem. Soc.</i> , 112:6979-6985, 1990, American Chemical Society.	
C34		GOLDER, et al., "5,10,15,20-meso-tetrakis(3,5-di-t-butyl-4-quinomethide)porphyrinogen: a highly puckered tetrapyrrolic macrocycle from the facile aerial oxidation of a phenolic porphyrin," <i>J. Chem. Soc., Chemical Communications</i> , 1751-1753, 1989, The Royal Society of Chemistry.	
C35		ISOZ, et al., "Niobium-carbon functionalities supported by meso-octaethylporphyrinogen and derived macrocycles," <i>Organometallics</i> , 15, 337-344, January, 1996, American Chemical Society.	
C36		JACOBY, et al., "Bifunctional carriers of organometallic functionalities: alkali-metal-zirconium-hydrido, -alkyl, and -allyl derivatives of meso-octaethylporphyrinogen and their reaction with isocyanides," <i>Organometallics</i> , 14:4816-4824, October, 1995, American Chemical Society.	
C37		JACOBY, et al., "Electrophilic activation of aliphatic C-H bonds mediated by zirconium hydride entities and applied to the functionalization of the porphyrinogen periphery," <i>J. Amer. Chem. Soc.</i> , 117:2805-2816, March, 1995, American Chemical Society.	
C38		JACOBY, et al., "Macrocyclic modification using organometallic methodologies. Regiochemically controlled mono- and bis-homologation reactions of porphyrinogen with carbon monoxide assisted by early transition metals," <i>J. Amer. Chem. Soc.</i> , 117:2793-2804, March, 1995, American Chemical Society.	

Examiner Signature	Date Considered
--------------------	-----------------

RECEIVED

NOV 26 2001

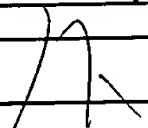
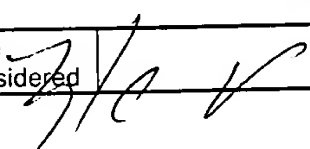
TECH CENTER 1600/2900

NOV 20 2001

Substitute for form 1449B/PT		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/939,514
		Filing Date	August 24, 2001
		First Named Inventor	Sessler, et al.
		Group Art Unit	1626
		Examiner Name	Not yet assigned
Sheet 4 of 7	Attorney Docket Number	045404.0003	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Ref. Des.	Exr. Injt.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C39		JACOBY, et al., "meso-Octamethylporphyrinogen metal complexes: an entry to high valent unsaturated metal centres," <i>J. Chem. Soc., Chemical Communications</i> , 220-222, 1991, The Royal Society of Chemistry.	
C40		JACOBY, et al., "The π and σ Bonding Modes of meso-Octaethylporphyrinogen to Transition Metals: the X-ray Structure of a meso-Octaethylporphyrinogen-Zirconium (IV) Complex and of the Parent meso-octaethylporphyrinogen Ligand," <i>J. Chem. Soc., Chem. Comm.</i> , pp. 790-792, 1991, The Royal Society of Chemistry.	
C41		JACOBY, et al., "Zirconium meso-octaethylporphyrinogen as a carrier for sodium hydride in toluene: Zirconium-sodium bimetallic hydride and alkyls," <i>J. Am. Chem. Soc.</i> , 115:3595-3602, 1993, American Chemical Society.	
C42		JONES, et al., "Mechanism of heterocyclic ring expansions. Part III. Reaction of pyrroles with dichlorocarbene," <i>J. Chem. Soc.</i> , 2249-2251, 1969, The Royal Society of Chemistry.	
C43		JONES, et al., "Mechanism of heterocyclic ring expansions. Part IV. Reaction of an imidazole, pyrazole and 1,2,4-triazole with dichlorocarbene," <i>J. Chem. Soc.</i> , 2251-2255, 1969, The Royal Society of Chemistry.	
C44		JONES, et al., "Mechanism of heterocyclic ring expansions. Part V. Base catalysed rearrangement of 2-dichloromethyl-2,5-dimethyl-2H-pyrrole and related compounds," <i>J. Chem. Soc.</i> , 2255-2259, 1969, The Royal Society of Chemistry.	
C45		JUBB, et al., "Preparation and reactivity of the first yttrium porphyrinogen complex," <i>J. Chem. Soc., Chemical Comm.</i> , 2641-2642, 1994, The Royal Society of Chemistry.	
C46		JUBB, et al., "Redox chemistry of meso-octaethylporphyrinogen: Formation and opening of a cyclopropane ring," <i>J. Am. Chem. Soc.</i> , 114:6571-6573, 1992, American Chemical Society.	
C47		JUBB, et al., "Lithium-Transition Metal Complexes Derived from meso-Octaethylporphyrinogen Which Display α - and π - Bonding Modes," <i>Inorganic Chem.</i> , 31:1306-1308, 1992, American Chemical Society.	
C48		KAMLET, et al., "Linear Solvation Energy Relationships. 23. A Comprehensive Collection of the Solvatochromic Parameters, π^* , α , and β , and Some Methods for Simplifying the Generalized Solvatochromic Equation," <i>J. Org. Chem.</i> , 48:2877-2887, 1983, American Chemical Society.	
C49		KOBAYASHI, et al., "A 'calix[4]arene' porphyrin as a new host and an oxygen carrier model," <i>Inorganica Chimica Acta</i> , 224:1-3, 1994, Elsevier Science, Ltd.	
C50		KURSANOV, N.I., "Cyclohexyl phenyl ether and its isomerization to cyclohexylphenol," <i>J. Russ. Phys. Chem. Soc.</i> , 48:1172-1174, 1916, Chemical Abstracts only, American Chemical Society.	
C51		MARX, et al., "A Porphyrinogen bridged with and a Porphyrin Substituted by 1,8-diethynylantracene," <i>Liebigs Ann. Chem.</i> , pp. 857-858, 1994, V C H Verlagsgesellschaft.	
C52		MARX, et al., "Ein Porphyrinogen mit 1,8-Diphenylantracene-Brücke," <i>Liebigs Ann. Chem.</i> , pp. 1041-1042, 1993, V C H Verlagsgesellschaft.	
C53		MORZHERIN, et al., "Chlorosulfonylated Calix[4]arenes: Precursors for Neutral Anion Receptors with a Selectivity for Hydrogen Sulfate," <i>J. Org. Chem.</i> , 58:7602-7605, 1993, American Chemical Society.	

Examiner Signature	Date Considered
	

RECEIVED

NOV 26 2001

TECH CENTER 1600/2800

Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/939,514
				Filing Date	August 24, 2001
				First Named Inventor	Sessler, et al.
				Group Art Unit	1626
				Examiner Name	Not yet assigned
Sheet	5	of	7	Attorney Docket Number	045404.0003

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Ref. Des.	Exr. Init.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C54	/	NAGASAKI, <i>et al.</i> , "Calix[4]arene-Capped Tetraphenylporphyrin: Synthetic Approach to a Chiral Capped Porphyrin with Regular C ₄ Symmetry," <i>Chem. Letters</i> , pp. 989-992, 1994, The Chemical Society of Japan.	
C55	/	NAGASAKI, <i>et al.</i> , "Design and synthesis of a C ₄ -symmetrical hard-soft ditopic metal receptor by calixarene-porphyrin coupling," <i>J. Chem. Soc. Perkin Trans.</i> , 1:1883-1888, August, 1995, Royal Society of Chemistry.	
C56	/	PAPPALARDO, <i>et al.</i> , "Novel 1,2-Bridged Calix[4]crowns in the 1,2-Alternate Conformation," <i>Tetrahedron Letters</i> , Vol. 37, No. 22, pp. 3907-3910, May, 1996, Elsevier Sciences Ltd.	
C57	/	PIARULLI, <i>et al.</i> , "Redox chemistry associated with the complexation of vanadium (V) and tungsten (VI) by meso-octaethylporphyrinogen: Formation and cleavage of cyclopropane units functioning as shuttles of two electrons," <i>J. Am. Chem. Soc.</i> , 118:3634-3642, March, 1996, American Chemical Society.	
C58	/	PIARULLI, <i>et al.</i> , "The Four-electron Oxidation of meso-Octaethylporphyrinogen via a Metal-mediated Dealkylation Process: Formation of [RuL(PhCN) ₂][H ₂ L=5,15-dihydro-5,5,10,15,15,20-hexaethylporphyrin]," <i>J. Chem. Soc., Chem. Comm.</i> , 895-896, 1994, Royal Society of Chemistry.	
C59	/	REES, <i>et al.</i> , "The mechanism of heterocyclic ring expansions. Part I. The reaction of 2,3-dimethylindole with dichlorocarbene," <i>J. Chem. Soc.</i> , 928-937, 1964, Royal Society of Chemistry.	
C60	/	REES, <i>et al.</i> , "The mechanism of heterocyclic ring expansions. Part II. The reaction of methylindoles with halogenocarbenes," <i>J. Chem. Soc.</i> , 938-945, 1964, Royal Society of Chemistry.	
C61	/	"Removal and recovery of toxic metal ions from aqueous waste streams by utilization of polymer pendant ligands," <i>Internet</i> , Posted October 10, 1995, publisher unknown.	
C62	/	ROSA, <i>et al.</i> , "The σ - and π - bonding modes of a tetraanionic porphyrinogen ligand in zirconium (IV) complexes: a theoretical investigation," <i>J. Chem. Soc., Dalton Transactions</i> , 3759-3766, 1993, Royal Society of Chemistry.	
C63	/	ROTHEMUND, <i>et al.</i> , "Concerning the structure of "Acetone-pyrrole," <i>J. Am. Chem. Soc.</i> , 77:3340-3342, 1955, American Chemical Society.	
C64	/	RUDKEVICH, <i>et al.</i> , "Biscalix[4]arene-Zn-tetraarylporphyrins," <i>Tetrahedron Letters</i> , Vol. 35, No. 38, pp. 7131-7134, 1994, Elsevier Sciences Ltd.	
C65	/	SCHEERDER, <i>et al.</i> , "Complexation of Halide Anions and Tricarboxylate Anions by Neutral Urea-Derivatized <i>p</i> -tert-Butylcalix[6]arenes," <i>J. Org. Chem.</i> , 60:6448-6454, October, 1995, American Chemical Society.	
C66	/	SESSLER, <i>et al.</i> , "Anion Binding: Self-Assembly of Polypyrrolic Macrocycles," <i>Angew. Chem. Int. Ed. Engl.</i> 35:2782-2785, June, 1996, VCH Verlagsgesellschaft.	
C67	/	SOLARI, <i>et al.</i> , "Bifunctional carriers of alkali-metal enolates: The use of zirconium meso-octaethylporphyrinogen in aldol condensation reactions," <i>Organometallics</i> , 16:508-510, 1997, American Chemical Society.	
C68	/	SOLARI, <i>et al.</i> , "Functionalizable 5,5,10,10,15,15,20,20-octaethylporphyrinogen complexes of early transition metals: Synthesis and Crystal Structure of titanium-, vanadium-, and chromium (III) derivatives and a two-electron oxidation of the porphyrinogen skeleton," <i>J. Chem. Soc., Dalton Transactions</i> , 2015-2017, 1994, Royal Society of Chemistry.	

Examiner Signature	Date Considered
--------------------	-----------------

O I P E

NOV 20 2001

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 6 Of 7

Complete if Known

Application Number	09/939,514
Filing Date	August 24, 2001
First Named Inventor	Sessler, et al.
Group Art Unit	1626
Examiner Name	Not yet assigned
Attorney Docket Number	045404.0003

TECH CENTER 1600/2900

NOV 26 2001

RECEIVED

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Ref. Des.	Exr. Init.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C69		STEED, et al., "A Water-Soluble "Bear Trap" Exhibiting Strong Anion Complexation Properties," <i>Angew. Chem. Int. Ed., Engl.</i> , 33:2456-2457, 1994, V C H Verlagsgesellschaft.	
C70		VON MALTZAN, B., "Synthesis of 2,3,7,8,12,13,17,18-octamethyl-porphyrinogen in almost quantitative yield," <i>Angewante Chemie</i> , International Edition, English, 785-786, 1982, V C H Verlagsgesellschaft.	
C71		XU, et. al., "Inorganic Inclusion Chemistry: A Novel Anion Inclusion System," <i>J. Am. Chem. Soc.</i> , 117:8362-8371, August, 1995, American Chemical Society.	
C72		Dialog Search, March 25, 1997, DIALOG ® Corp.	
C73		CHELINTZEV, et. al., "Simple condensation of pyrrole with cyclohexanone and other cyclic ketones in mixed condensation with acetone and cyclohexanone, and conclusions in respect to the ability of different ketones to condense with pyrrole," <i>J. Russ. Phys. Chem. Soc.</i> , 48:1210-1221, 1916, Chemical Abstracts only, pp. 1418-1419, American Chemical Society.	
C74		GUTSCHE, C. David, "Calixarenes," <i>Monographs in Supramolecular Chemistry</i> , ix-xii, Title Page and Table of Contents only, 1989, Royal Society of Chemistry.	
C75		NO, et. al., "Synthesis and Molecular Structure of Calix[4]arene Butanoate 1,2-Alternate Conformer," <i>Bull. Korean Chem. Soc.</i> , 17:447-452, 1996, Korean Chemical Society.	
C76		SESSLER, et al., "Calixpyrroles: Old Yet New Anion Binding Agents," <i>XXI International Symposium on Macrocyclic Chemistry</i> , PB 29:158, June 23-28, 1996, publisher unknown.	
C77		PCT International Search Report, Appl. No. PCT/US 97/05643, August 13, 1997.	
C78		AOYAMA, et al., "Multi-Point Interaction of Phosphates with Protonated Pyridylporphyrin Discrimination of Monoalkyl and Dialkyl Phosphates," <i>Chemistry Letters</i> , pp. 1241-1244, 1991, The Chemical Society of Japan.	
C79		VOGEL, et al., "2,7,12,17-Tetrapropylporphycene-Counterpart of Octaethylporphyrin in the Porphycene Series," <i>Angew. Chem. Int. Ed. Engl.</i> , 26, No. 9, pp. 928-931, 1987, V C H Verlagsgesellschaft.	
C80		VOGEL, et al., "New Porphycene Ligands: Octaethyl- and Etioporphycene (OEPc and Etiopc) - Tetra - and Pentacoordinated Zinc Complexes of OEPc," <i>Angew. Chem. Intl. Ed. Engl.</i> , 32, No. 11, pp. 1600-1604, 1993, V C H Verlagsgesellschaft.	
C81		Pending Application in India; No. 708/MAS/97 to Gale et al. filed April 3, 1997.	
C82		FURUSHO, et al., "Molecular Design and Functions of Novel Porphyrinogens," <i>67th Annual Meeting of the Chemical Society of Japan, Tokyo, Abstract 3D238</i> , 1994 (in Japanese with English translation); The Chemical Society of Japan.	
C83		FURUSHO, et al., "Guest responsive structural changes of porphyrinogen inclusion crystals: a longrange cooperative effect on guest inclusion," <i>Chemical Communications</i> , No. 22, pp. 2205-2206, page vii, and cover page, November 21, 1997, Royal Society of Chemistry.	
C84		GALE, et al., "Calixpyrroles," <i>Chem. Comm.</i> , pp. 1-8, 1998, Royal Society of Chemistry.	
C85		IVERSON, et al., "Molecular Recognition of Anionic Species by Silica Gel Bound Sapphyrin," <i>J. Am. Chem. Soc.</i> , Vol. 116, pp. 2663-2664, 1994, American Chemical Society.	
C86		SESSLER, et al., "Calix[4]pyrroles: New Solid-Phase HPLC Supports for the Separation of Anions," <i>Chem. Eur. J.</i> , Vol. 4, No. 6, pp. 1095-1099, 1998, Wiley-VCH Verlag.	
C87		ANZENBACHER, et al., "Calix[4]pyrroles Containing Deep Cavities and Fixed Walls. Synthesis, Structural Studies, and Anion Binding Properties of the Isomeric Products Derived from the Condensation of <i>p</i> -Hydroxyacetophenone and Pyrrole," <i>J. Am. Chem. Soc.</i> , Vol. 121, pp. 11020-11021, 1999, American Chemical Society. (Published on Web 11/13/1999)	

Examiner
Signature

Date
Considered

Substitute for form 449B/PTO
INFORMATION DISCLOSURE STATEMENT BY APPLICANT
 (use as many sheets as necessary)

NOV 20 2001
 383 OFFICE
 PAT & TRADEMARK

Sheet 7 Of 7

Complete if Known

Application Number 09/939,514
 Filing Date August 24, 2001
 First Named Inventor Sessler, et al.
 Group Art Unit 1626
 Examiner Name Not yet assigned
 Attorney Docket Number 045404.0003


RECEIVED
 NOV 26 2001
 TECH CENTER 1600/2900

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Ref. Des.	Exr. Init.	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
C88		ANZENBACHER, et al., "Second Generation Calixpyrrole Anion Sensors", <i>J. Am. Chem. Soc.</i> , Vol. 122, pp. 9350-9351, 2000, American Chemical Society. (Published on Web 09/08/2000)	
C89		ANZENBACHER, et al., "Fluorinated Calix[4]pyrrole and Dipyrrolylquinoxaline: Neutral Anion Receptors with Augmented Affinities and Enhanced Selectives", <i>J. Am. Chem. Soc.</i> , Vol. 122, pp. 10268-10272, 2000, American Chemical Society. (Published on Web 10/07/2000)	
C90		ARUMUGAM, et al., "Convenient Route to Super-Expanded Calixpyrroles: Synthesis of Calix[n]furano[m]pyrroles (n = 3, 4, 6, 8 and m = 2, 4)", <i>Organic Letters</i> , Vol. 2, No. 20, pp. 3115-3117, 2000, American Chemical Society. (Published on Web 09/01/2000)	
C91		CAFEO, et al., "From Large Furan-Based Calixarenes to Calixpyrroles and Calix[n]furan[m]pyrroles: Syntheses and Structures", <i>Angew. Chem. Int. Ed.</i> , Vol. 39, No. 8, pp. 1496-1498, 2000, Wiley-VCH Verlag.	
C92		CAFEO, et al., "The complexation of halide ions by a calix[6]pyrrole", <i>Chem. Commun.</i> , pp. 1207-1208, 2000, The Royal Society of Chemistry.	
C93		GALE, et al., "A colourimetric calix[4]pyrrole-4-nitrophenolate based anion sensor", <i>Chem. Commun.</i> , pp. 1851-1852, 1999, The Royal Society of Chemistry.	
C94		GALE, et al., "Calix[4]pyrroles: Old Yet New Anion-Binding Agents", <i>J. Am. Chem. Soc.</i> , Vol. 118, pp. 5140-5141, 1996, American Chemical Society.	
C95		GALE, et al., "First Synthesis of an Expanded Calixpyrrole", <i>Tetrahedron Letters</i> , Vol. 38, No. 49, pp. 8443-8444, 1997, Elsevier Science Ltd.	
C96		JANG, et al., "Synthesis of calix[n]furano[n]pyrroles and calix[n]thieno[n]pyrroles (n = 2, 3, 4) by '3+1' approach", <i>Tetrahedron Letters</i> , Vol. 41, pp. 2919-2923, 2000, Elsevier Science Ltd.	
C97		MIYAJI, et al., "Anthracene-linked calix[4]pyrroles: fluorescent chemosensors for anions", <i>Chem. Commun.</i> , pp. 1723-1724, 1999, The Royal Society of Chemistry.	
C98		MIYAJI, et al., "Naked-Eye Detection of Anions in Dichloromethane: Colorimetric Anion Sensors Based on Calix[4]pyrrole", <i>Angew. Chem. Int. Ed.</i> , Vol. 39, No. 10, pp. 1777-1780, 2000, Wiley-VCH Verlag.	
C99		SESSLER, et al., "Anion carriers: New tools for crossing membranes", <i>ChemTech</i> , Vol. 29, No. 9, pp. 16-24, 1999, American Chemical Society.	
C100		SESSLER, et al., "Direct Synthesis of Expanded Fluorinated Calix[n]pyrroles: Decafluorocalix[5]pyrrole and Hexadecafluorocalix[8]pyrrole", <i>J. Am. Chem. Soc.</i> , Vol. 122, pp. 12061-12062, 2000, American Chemical Society. (Published on Web 11/15/2000)	
C101		TURNER, et al., "Extended Calixpyrroles: meso-Substituted Calix[6]pyrroles", <i>Angew. Chem. Int. Ed.</i> , Vol. 37, No. 18, pp. 2475-2478, 1998, Wiley-VCH Verlag.	
C102		WILCOX, Craig S., "Design, Synthesis, and Evaluation of an Efficacious Functional Group Dyad. Methods and Limitations in the Use of NMR for Measuring Host-Guest Interactions", <i>Frontiers in Supramolecular Organic Chemistry and Photochemistry</i> , edited by Schneider and Dürr, pp. 123-143, 1991, VCH Verlagsgesellschaft.	
C103		WOLLER, et al., "A straightforward Synthesis of 3,4-Difluoropyrrole", <i>J. Org. Chem.</i> , Vol. 63, pp. 5706-5707, 1998, American Chemical Society. (Published on Web 07/17/1998)	
C104		Pending Application of Gale et al., Serial No. 09/838,998, filed 04/20/01.	

Examiner Signature

Date Considered

Complete in  own

(use as many sheets as necessary)

Application Number	09/939,514
Filing Date	08/24/01
First Named Inventor	Sessler, et al.
Group Art Unit	1626
Examiner Name	Not Yet Assigned
Attorney Docket Number	045404.0003

TECH CENTER 1600/2900

APR 04 2002

RECEIVED

[illegible][illegible]

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
	BEER et al., "Synthesis and X-Ray Crystal Structure of a New Redox-active Calix[5]arene Containing a Totally Included Ethanol Molecule", J. Chem. Soc., Chem. Commun., pp. 1851-1852, (1995), The Royal Society of Chemistry.	
	FREEMANTLE, Michael, "Calixarene Family Embraces New Cousins", Chemical & Engineering News, Vol. 76, No.7, pp. 31-32, (1998), American Chemical Society.	
	GUTSCHE et al., "Calixarenes. 4. The Synthesis, Characterization, and Properties of the Calixarenes from p-tert-Butylphenol", J. Am. Chem. Soc., Vol. 103, No. 13, pp. 3782-3792, (1981), American Chemical Society.	

Date
Considered